

## ABSTRACT

A method for isolating human neuroepithelial precursor cells from human fetal tissue by culturing the human fetal cells in fibroblast growth factor and chick embryo extract and immunodepleting from the cultured human fetal cells any cells expressing A2B5, NG2 and eNCAM is provided. In addition, methods for transplanting these cells into an animal are provided. Animals models transplanted with these human neuroepithelial precursor cells and methods for monitoring survival, proliferation, differentiation and migration of the cells in the animal model via detection of human specific markers are also provided.